

Amabec, a warehousing and transport logistics company, was in the process of constructing a state-of-the-art warehouse on the south shore of Montréal, with a completion date set for the end of 2023. The facility, larger than a football field, was designed specifically for frozen food products.

# Challenge

The challenge was to protect the structural integrity of the warehouse slab, particularly in the freezer section, by preventing the ground from freezing. Freezing ground posed the risk of heaving, potentially causing damage to the freezer slab.

### **Solution**

Amabec chose to implement a frost heave protection system, addressing the issue by circulating a heated glycol solution through tubing installed in the soil beneath the freezer floor. The chosen tubing for this critical task was VIPERT™ Radiant, a recyclable PE-RT product proudly manufactured by CB Supplies, a recognized Canadian provider of plumbing and HVAC & R solutions.

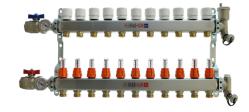
# **Project Scope**

In addition to the frost heave protection system at 6,827 sq.m. (73,487 sq.ft.), the project included a 1,115 sq.m. (12,000 sq.ft.) office space with a radiant heating system and a 223 sq.m (2,400 sq.ft.) exterior loading area featuring an advanced snow and ice melt system. CB Supplies also supported the installation of these systems with design, ensuring optimal efficiency and performance.

#### **FEATURES & BENEFITS**

- · INDUSTRY LEADING FLEXIBILITY FOR EASIER & FASTER INSTALLATION
- STRENGTH, DURABILITY & BUILT FOR EXTREME TEMPERATURES
- 100% RECYCLABLE & LOWEST GHG EMISSIONS
- CRIMP, EXPAND OR PUSH
  Choose your preferred joining method
- NO NONSENSE 25-YEAR WARRANTY
- · PE-RT TUBING SIZES: 3/8" through 2"

CB SUPPLIES VIPERT® RADIANT C



1-1/4" IVAR Stainless Steel Hydronic Manifolds (2 – 12 loops)

## **CB Supplies' Contribution**

To meet the requirements of the project, CB Supplies' VIPERT Radiant oxygen-protected tubing played an important role. A total of 25 kilometers (15.5 miles) of VIPERT tubing was distributed through 21 CB Supplies / IVAR manifolds, providing complete and effective coverage for the frost heave protection system, radiant heating, and snow and ice melt systems. Plomberie Bryan Lambert from Saint-Pie, Québec, installed and commissioned these hydronic systems.

### **Benefits and Outcome**

By choosing CB Supplies' VIPERT radiant tubing, Amabec ensured a reliable hydronic solution for preventing ground freezing by maintaining optimal conditions for the freezer slab. The integration of VIPERT tubing and IVAR manifolds also provided efficient and sustainable performance for the radiant heating and snow & ice melt systems, showcasing CB Supplies' commitment to delivering high-quality solutions. Additionally, leveraging their extensive expertise in hydronic system solutions, CB Supplies provides design and layouts tailored for residential and commercial projects.

